

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005708**Date Inspected:** 03-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Shen Fu You			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	OBG		

**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14: QA Inspector randomly observed ZPMC qualified welder ID #045265 welding Seg 003-005 deck panel DP560A to DP 545A. Welder was observed welding in the 1G (flat) position utilizing the Submerged Arc Welding (SAW) process. QA Inspector observed the ZPMC QC Inspector Wu Bin verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters taken for welder # 045265 as follows: preheat temperature to be at 68°C and measured the welding parameters to be 561 amps, 31 volts, a travel speed of 468 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-T-2221-B-L2C-S-2.

Segment 4BW: QA Inspector received notification that segment 4BW welds and base material had been visually inspected by ABF and ZPMC QC personnel and was ready for QA visual inspection. QA Inspector performed visual verification on QC inspectors accepted welds and base material between panel points 27 and 26. QA Inspector marked twenty four (24) indications (porosity, rollover, arc strikes, weld spatter, slag, unacceptable weld profile, and base material mishandling) that are unacceptable to AWS D1.5 (02) section 6.26 for repairs between panel points 27 and 28. QA Inspector informed ABF QC Inspector Man Kit Le and ZPMC QC of the indications marked. ABF QC Inspector and ZPMC QC concurred with QA Inspectors findings and marked indication areas themselves. ZPMC QC directed workers to repair the marked indications. QA Inspector asked ABF QC and ZPMC QC to reinspect the segment and the repaired marked areas then inform QA Inspector when inspection is

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## WELDING INSPECTION REPORT

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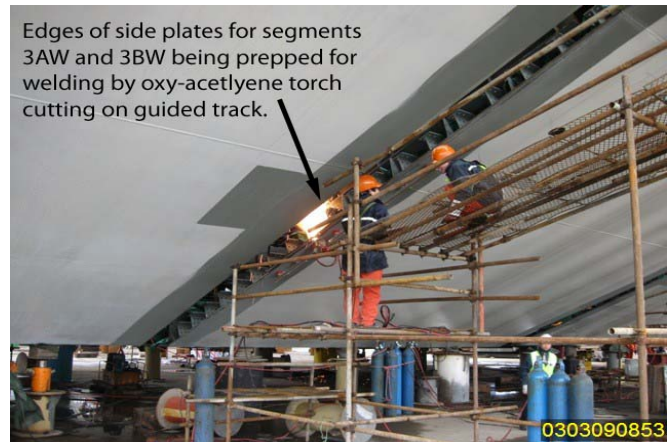
complete. ABF and ZPMC QC Inspectors agreed and will notify QA Inspector when segment 4BW is ready for QA visual verification.

QA Inspector observed the edges of side plates for segments 3AW and 3BW being prepped for welding by oxy-acetylene torch cutting on guided track by ZPMC workers. The joint design being prepped is a single V groove butt weld. QC Inspector informed QA Inspector when the cutting is complete the edge prep will be checked for conformance to the approved joint design on the WPS and AWS D1.5 (02).

Unless otherwise noted, all work observed on this date appears to be in general compliance with the applicable contract documents.

### Summary of Conversations:

Conversations noted in items observed.



### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prue,Erik	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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